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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/991,164	11/16/2001	John C. Weast	10559-550001/P12570	3532

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EXAMINER	
CHEN, TSE W	

ART UNIT	PAPER NUMBER
2116	

MAIL DATE	DELIVERY MODE
01/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief	**Application No.** 09/991,164	**Applicant(s)** WEAST, JOHN C.	
	Examiner Tse Chen	**Art Unit** 2116	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 03 January 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
   a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
   b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: *See Continuation Sheet*. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: _____.
   Claim(s) objected to: _____.
   Claim(s) rejected: _____.
   Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

Continuation of 3. NOTE: New limitations such as "extending battery life of the platform while minimizing adverse effects on performance and/or functionality of the platform" requires further consideration and/or search.

Continuation of 11. does NOT place the application in condition for allowance because: Applicant's arguments filed January 3, 2007 have been fully considered but they are not persuasive. Various concessions of Applicant may be found in previous Applicant response. Applicant argues that McGrew teaches "buffering always occurs before storing". Examiner agrees with Applicant's concession that McGrew does teach buffering before storing which corresponds to limitation requiring buffering the data when the device is inactivated [i.e., buffer before the device can be activated to be stored]. Applicant argues that Ryu does not teach the step of determining the actual power state of the NV storage. Examiner disagrees and submits that the actual power state of the NV storage must be determined in order to apply the appropriate power. Applicant argues that Ryu teaches away from buffering the data to prevent unnecessary activation of the storage device. Examiner did not find any explicit teachings in Ryu against buffering the data to prevent unnecessary activation of the storage device. Applicant argues that Ryu does not determine whether the device is operating in a limited power state prior to determining whether the device is activated or inactivated. Examiner disagrees and submits that Ryu does disclose determining whether the device is operating in a limited power state [battery voltage level] prior to determining whether the device is activated or inactivated [determined in order to write] [col.6, l.52 - col.7, l.5]. Applicant argues that Morcom does not teach that the requested portion is returned to the requesting process before a remainder is read. Examiner disagrees and submits that Morcom does teach that the requested portion is returned to the requesting process before a remainder is read [col.5, ll.7-26; first data is returned before additional data is read]. Applicant argues that Ryu does not determine whether the device is operating under battery power. Examiner disagrees and submits that Ryu is concerned with power consumption of a device operating under the limited power supply of a battery [col.4, ll.44-52; fig.7a]. Applicant argues that Ryu fails to teach writing one or more buffered write operations to the non-volatile storage device upon an occurrence of a detected predetermined condition. Examiner disagrees and submits Applicant's concession that Ryu does teach "data is stored in a device when battery power is low to prevent loss of data" where the predetermined condition may be associated with "when battery power is low". Applicant argues that Morcom teaches away from selectively reading a superset; it is inherent in the limitation of selectively that a superset might not be read in some cases. Examiner disagrees and submits that it is also inherent in the limitation of selectively that a superset be read in some cases. Applicant argues that if the cache is smaller than the file, then Morcom cannot copy the entire file. Examiner submits that Morcom did not place any restriction on the cache size and specifically indicated that 108 is to be filled with the entire file. Applicant argues that Ryu does not teach selectively buffering a file system write request relating to the non-volatile storage device based on the determined power state of the non-volatile storage device. Examiner disagrees and submits that absent any limitations directed to any particular buffer, inherent buffering in the broadest interpretation of a write request is needed to determine the fulfillment of that request. Applicant argues that Rao does not teach "the read/write policy be provided to the file system driver by the intermediate file system driver based on user customized parameters". Examiner disagrees and submits that absent any limitations regarding the form of read/write policy, Rao does disclose the read/write policy be provided to the file system driver by the intermediate file system driver based on user customized parameters [col.5, ll.19-46; col.7, ll.6-48; col.9, l.13 - col.10, l.34]. Applicant argues that Rao does not teach selectively buffering. Examiner agrees with Applicant's concession that Rao does teach "buffering disk writes to buffers" which corresponds to buffering the write request to physical memory until a predetermined condition is detected [passing error monitoring/correcting] [col.5, ll.19-46]. Applicant argues that "reason for registration" is misunderstood. Examiner submits a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Applicant argues that Olds does not teach "buffering write operations to physical memory when the device is inactivated". Examiner disagrees and submits that Olds does teach buffering write operations to physical memory when the device is inactivated [unfavorable] [col.1, ll.41-59; col.2, ll.7-19]. Applicant argues that "a favorable condition could be that the battery power is at full level". Examiner submits that the favorable condition in the context of Olds pertains to the disc drive. Applicant argues that Olds "teaches away from buffering, in order to reduce latencies". Examiner disagrees as there are no such teachings in Olds. Applicant argues that "a device being powered up vs. being powered down is not the same as a spindle being at a different velocity". Examiner disagrees and submits that the spindle speed is related to power; hence, if the device is powered down, the spindle speed is down also. If Applicant is equating powered-down to powered-off, Examiner notes that Applicant did not disclose any specific enabling means regarding how the device would be re-activated [i.e., with all components off, the device would not be able to process any signals for activation] in the original disclosure. Applicant argues that Klassen does not teach "writing one or more buffered write operations to the device upon an occurrence of a predetermined condition". Examiner disagrees and submits that normal spindle velocity can be considered to be a predetermined condition. Applicant argues that Klassen teaches "away from buffering". Examiner disagrees as there are no such teachings in Klassen. Applicant argues that Wong "teach caching data to a disk drive and not to physical memory". Examiner agrees with Applicant's concession that Wong does teach "objects cached by urlfs may be stored in memory and in a disk or in a disk only" and submits that memory can be considered to be physical memory. Applicant argues that Wong is "improperly combined with the other references". Examiner disagrees and submits that increasing the efficiency of write operations to disk drives is proper motivation to combine with the other references involving storage devices. Applicant argues that Barrett does not teach "caching to physical memory". Examiner disagrees and submits Applicant's concession that Barrett does teach "data stored in a disk cache" where a cache is considered to be physical memory. Applicant argues that "registration is not a term that one of ordinary skill in the art would assume means that a flag is set in a file". Examiner disagrees and submits that to register means to record which would correspond to setting a flag [i.e., to record certain attribute]. Applicant argues that Klassen does not teach "determining whether a limited power condition exists". Examiner disagrees and submits Applicant's concession that Klassen does teach "the controller reduces speed when the storage device is powered by battery" where a limited condition is associated with a battery. Applicant argues that "applying Morcom to Klaasen would increase the power consumption". Examiner submits that Applicant's mere conclusory statement has no supporting evidence. Applicant argues that a "subset" of a file cannot be the entire file, but is to be "a portion smaller than the entire file". Examiner was not able to find the explicit definition that stipulates a subset to be "a portion smaller than the entire file". Applicant argues that Morcom "would return data retrieved from cache memory to the process and would preclude returning data retrieved form the device". Examiner submits that data retrieved from cache memory are data retrieved from the device. Applicant argues that "Morcom does not teach an inherent determination that a superset of the requested portion has been read into memory". Examiner disagrees and submits Morcom discloses that if a superset of the requested

file portion is read into memory, further comprising accessing the superset read into memory to fulfill a subsequent request from the process for a portion of the file [col.5, ll.7-19]. Examiner notes that Applicant did not disclose any specific enabling means regarding how the device would determine that a superset of the requested portion has been read into memory. Applicant argues that it is "improper to combine the teaching of Morcom with Hirofuji as they teach incompatible methods" with support from mere conslusory statements such as "cannot select a portion of a file and also fill cache until it is full". Examiner submits that one can indeed fill a cache with portions of a file. Applicant argues that Hirofuji does not teach "a superset of the requested file portion may be selectively stored based on a relative priority". Examiner disagrees and submits Applicant's concession that Hirofuji does disclose "data may be stored differently based on its access type" where random access data would have higher priority than sequential access data [in terms of storage amount]. Applicant argues that Morton does not teach "wherein the superset of the requested file portion is logically related to the requested portion". Examiner submits that Morton was not cited to teach wherein the superset of the requested file portion is logically related to the requested portion. Applicant cited various court opinions to support patentability. Examiner submits that patentability is determined on a case-by-case basis.

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1/17/07